

Applicant: Takao Tsuruoka
Application No.: 10/530,085

REMARKS/ARGUMENTS

The present application contains claims 1-7, 17, 18 and 22. Claims 8-16 and 19-21 have been cancelled as being directed to non-elected subject matter. The cancelled claims are being filed in divisional applications. Claims 1, 3 and 17 have been amended.

Making reference to the Office Action Summary, it is noted that the Final Office Action is responsive to the Amendment filed November 24, 2008, and that a three-month response date has been set. It is submitted that this Reply is timely filed.

Title

It is assumed that the new title submitted as part of the Amendment filed November 24, 2008, has been accepted.

Claim Rejections - 35 U.S.C. §103

The rejection of claims 1 and 17 under 35 U.S.C. §103(a) as unpatentable over Til Aach et al. (WO 97/23993A) (hereinafter, "Til et al.") in view of Adam Jacobs (U.S. Patent No. 7,102,672 B1) (hereinafter, "Jacobs") is respectfully traversed.

Claim Rejections - 35 U.S.C. §103

The rejection of claim 4, 6 and 18 under 35 U.S.C. §103(a) as unpatentable over Til et al. in view of Jacobs and further in view of Hisashi Yonekawa et al. (U.S. Patent No. 5,046,121) (hereinafter, "Yonekawa et al.") is respectfully traversed.

Telephonic Interview

Applicant wishes to thank Examiner for the courtesy of granting a telephone interview conducted April 29, 2009, and for the helpful comments put forth to expedite the prosecution of the present application and thereby place the application in condition for allowance.

As was discussed during the telephone interview, it is noted that the cited prior art presently of record does not teach “a noise estimator for estimating an amount of noise of a frequency component except for a zero-order component based on a combination of a zero-order component in the signal in the frequency space transformed by the transforming unit, and ~~as well as~~ the temperature and signal gain provided by the obtaining unit,” as set forth in claim 1 as amended, since Til et al. is limited to estimating noise based on a zero-order component taken alone; Jacobs is limited to estimating noise based on temperature of the pickup device taken alone; and Jacobs is further limited to estimate noise based on gain taken alone, and there is no teaching or motivation in either Til et al. or Jacobs to use all three of the above as inputs in combination to a noise estimator to estimate noise.

Yonekawa et al. is limited to teaching averaging the amplitude of AC components to determine upper and lower limits of the frequency component, except for the zero-order component, and using the upper and lower limits as a reference for correcting frequency components based on the range to suppress boundary artifacts, which might otherwise occur due to improper cutoff frequency, can be suppressed and Yonekawa et al. thus lacks the teachings lacking in Til et al. and Jacobs.

It was Applicant's intention in the prior amendment to claim that all three of the above mentioned inputs are used in combination to a noise estimator obtain a noise estimate.

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Applicant therefore requests that the amendment to claim 1, which adopts the Examiner's suggestion found in Item 6, at page 4, lines 1-5 as discussed during the telephone interview, be entered and made of record in the present application and that the claim 1 be allowed after the Final action without the need for filing a Request for Continued Examination (RCE).

Allowable Subject Matter

Allowable claim 22 depends from amended claim 1 and it is submitted that claim 22 is patentable over Til et al. and Jacobs for the reasons set forth above regarding amended claim 1. Claims 2 and 3, which have been indicated as being allowable, depend from claim 22 and, in view of the amendment of claim 1 to patentably distinguish over Til et al. and Jacobs, it is submitted that there is no need to amend claims 2-3 and 22 to insert the limitations of their main claim and any intervening claims. Allowable claims 5 and 7, as well as claims 4 and 6, all depend from claim 1 or a claim which depends from claim 1 and it is submitted that claim 4-7 are allowable.

Claim 17 was also discussed during the telephone interview and the Examiner stated that claim 17 would be allowable over the cited prior art if amended in a manner similar to claim 1. Claim 17 has been so amended and it is submitted that claim 17 and 18, which depends from claim 17 are now allowable.

In view of the foregoing, reconsideration and allowance of claims 1, 4, 6, 17 and 18, together with allowable claims 2, 3, 5, 7 and 22 are earnestly solicited.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a

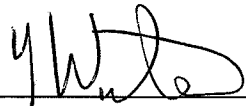
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telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicant respectfully submit that the present application, including claims 1-7, 17-18 and, 22, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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